## DEPARTMENT of the INTERIOR

news release

FISH AND WILDLIFE SERVICE

FEATURE

For Release July 25, 1971

Walker 343-5634

## SALMON

Salmon are wide-ranging fish with an amazing instinct for finding their way back to where they began life.

The journey of the Atlantic salmon is from European and North American streams to fertile waters of the North Atlantic for feeding and growth until ready for return to ancestral fresh waters for spawning. Heavy catches are made in waters off Greenland.

Some Pacific species are even greater wanderers, swimming with the currents to follow the food, several thousand miles in a loop from our Northwest toward Japan and back at maturity to spawn--in the same headwater where they originated.

Many theories have been advanced to explain the homing habits of Pacific salmon. Recent experiments, however, indicate that the fish detect the minute electrical charge of the polar magnetic field carried to them by the sea water to guide them back to their natal stream, and there respond to faint chemical traces imprinted on them during their seward migration to return upstream. But no matter what the explanation, humans marvel at their navigation, and enjoy watching the migrations, which offer anglers chances to enjoy what is some of the best sport fishing in the world.

Atlantic salmon run up rivers in spring and early summer from New England north all along Canada's east coast, and though they cease to feed when they enter fresh water, one might be induced to strike a well-presented lure or fly. These fish may return for spawning more than once if they survive the rigors and perils of their journey.

Eastern "landlocked" salmon are descendants of the Atlantic salmon-isolated in fresh waters, but nevertheless continuing to spawn and survive without returning to the seas.

Pacific species run from early spring to late fall, but all spawn in fall or winter, and they do not survive after spawning. The chinook is famous for its size and fighting ability; fishermen from all over the country gather at West Coast sites each year for a chance to land one. The fish ranges from California's north coast to Alaska and can grow beyond 90 pounds, but a 25-pounder is an average prize. Chinook are not much for flies and cease to feed once they reach fresh water, but they will strike at lures. "Mooching" is a favorite method which involves working bait up and back whether while trolling from a boat or bank fishing. Spinners, plugs, and large streamers are also used by some anglers.

The sockeye, pink, and chum are other Pacific species, but they are taken mostly in the commercial catch.

The little kokanee is the landlocked version of the sockeye salmon which has been successfully transplanted into many fresh water lakes across the country, where it is highly prized for its beauty. Trolling is a favorite angling method for this fish, famed for flashy leaps.

The coho has won the honor of providing the greatest sport catch of any salmon in the country. Hundreds of thousands are caught by West Coast sportsmen every year, and successful transplants of the fish to the Great Lakes have enabled many inland anglers to try salmon fishing. Three- to 10-pounders are the usual catches, but fish approaching 40 pounds have been caught in Lake Michigan. Known for wild leaps when hooked, cohos are a challenge for light tackle.

The Great Lakes' coho success story dates back to initial transplants by Michigan in 1966. Good survival of young that year led to larger transplants in succeeding years, until 1970 anglers harvested as many as 600,000 good-sized adults. Neighboring States joined in, and a 50-50 funding arrangement developed between them and the Interior Department's Fish and Wildlife Service under the Federal Anadromous Fish Conservation program.

Michigan in particular feels its investment in cohos has been good, in that for each million dollars invested in the resource, as much as \$13 million is generated by sportsmen buying goods and services. Entire communities, including Manistee, have been rejuvenated by serving as "sport fishing towns," catering to the needs of anglers seeking the coho. Anglers come primarily from the Lakes Region, but some travel across country just to savor the sport there.

Another bonus is the decline in die-offs of the rapidly breeding and dying alewife populations. Cohos feed on this herring-type forage fish and help control its numbers. The result has been a marked decline in miles of Lake shorelines formerly befouled by dead, smelly alewives.

Biologically salmon are closely related to trout, resembling them in streamlined bodies, but generally salmon are much larger. The Atlantic salmon is bright silver and blue with X-shaped spots along its body. Pacific species are silvery with white bellies and dark green backs, but their colors darken and change in fresh water. Flesh of most salmon is pink, and a variety of cooking methods, including baking, filleting, panfrying, and smoking make it a gourmet food.

Dams and pollution going back to the 19th century ruined Atlantic salmon runs in much of New England, but the Interior Department's Fish and Wildlife Service is working with the New England States to improve conditions so that fish can move upstream again.

Federal and State hatcheries on the West Coast are rearing salmon for planting in the Sacramento and Columbia Rivers, and many of the coastal streams to maintain or restore runs. Success here has been much greater than in New England because stream damage has not been as great and because commercial and sport fishermen together have been able to secure greater effort and support for the restoration program.

Atlantic salmon are additionally threatened by unlimited netting near the Greenland feeding grounds, but sentiment is growing in a number of countries for an international convention to limit the catches.

Will the salmon continue to provide choice sport and food? Much depends on whether our country can accommodate construction in rivers so that migrations are not blocked, and whether pollution can be arrested.

